Washington State Department of Transportation

Design Manual Supplement

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Effective Date: May 3, 2000

Left-Side HOV Parallel On-Connection

I. Introduction

A. Purpose

To modify Washington State Department of Transportation (WSDOT) policies regarding left-side HOV on-connections.

B. Background

In April 1998, WSDOT published a draft *HOV Direct Access Design Guide* (HOV Guide) that gives guidance for facilities that provide direct access for high occupancy vehicles (HOVs) between an HOV lane on a freeway and a facility off that freeway. The parallel on-connection provided in the HOV Guide was for a right-side ramp with modifications for left-side connections because the *Design Manual* did not include parallel on-connections. In June 1999 the *Design Manual* was revised to include parallel on and off-connections for connections on the right. Therefore, Figure 5-3 of the HOV Guide is revised to include only left-side HOV on-connections.

In response to feedback and experience gained following the publication of the HOV Guide, Figure 5-3 is also revised to make the intended meaning clearer.

C. References

Design Manual, M 22-01

HOV Direct Access Design Guide (HOV Guide), Draft M 22-98

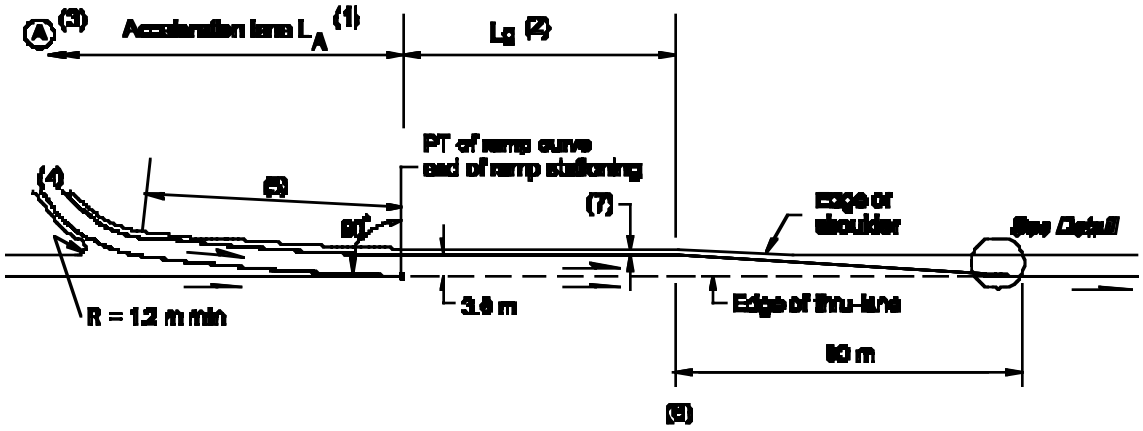
D. Effective Date and Term

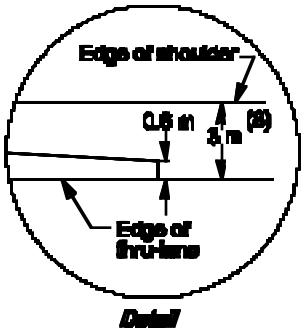
These rules and procedures are effective on the date of this letter and will expire when the changes are incorporated in the referenced manuals.

II. Instructions

Revise Draft HOV Direct Access Guide Chapter 5

Replace Figure 5-3 with the attached revised Figure 5-3.





Notes:

(1) See Figure 5-4 for acceleration lane length L_A. Check L_A for each ramp design speed.

(2) L_g is the gap acceptance length. Begin L_g at the beginning of the parallel lane, as shown, but not before the end of the acceleration lane L_A. See Figure 5-2 for the length L_g.

(3) Point (A) is the point controlling the ramp design speed or the end of the transit stop zone or other stopping point.

(4) See 5.06 for ramp lane and shoulder widths.

(5) A transition curve with a minimum radius of 900 m is desirable. The desirable length is 90 m. When the main line is on a curve to the right, the transition may vary from a 900 m radius to tangent to the main line. The transition curve may be replaced by a 50:1 taper with a minimum length of 90 m.

(6) Angle point for width transitions, when required. See *Design Manual* Chapter 620 for pavement transitions.

(7) See 5.06 (2) for ramp shoulder width.

(8) The 3 m left shoulder is the minimum width; 4.2 m is preferred. Maintain this shoulder width for at least 150 m; 300 m is preferred.

(9) For striping, see the Standard Plans.

Single Lane Left-Side HOV On-Connection
***Figure* 5-3**